

2008 Crop Statistics & Annual Report



County of San Diego
Department of Agriculture, Weights & Measures

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“navel oranges 99c LB” by Robert S Donovan

The 2008 Crop Statistics and Annual Report was produced by Deputy Agricultural Commissioner/Sealer Dawn Nielsen and Agricultural Inspector Marcia Milam with assistance from GIS Analyst John Taylor.

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 SEALER OF WEIGHTS AND MEASURES

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A.G. Kawamura, Secretary
 California Department of Food and Agriculture
 and
 The Honorable Board of Supervisors of the County of San Diego
 Supervisor Dianne Jacob, Chairwoman, 2nd District
 Supervisor Pam Slater-Price, Vice Chairwoman, 3rd District
 Supervisor Greg Cox, 1st District
 Supervisor Ron Roberts, 4th District
 Supervisor Bill Horn, 5th District

I respectfully submit the 2008 report of acreage, yield, and value of agricultural production for San Diego County. This report also contains the annual report of the many diverse programs within the Department of Agriculture, Weights and Measures that support the County's focus on children, the environment, and safe and livable communities.

Despite drought and a slowing economy, the total value of San Diego County agriculture increased 1% over 2007 for a final dollar value of \$1,552,221,674. This is mainly due to an increase in value for a few key crops. Cut flowers, avocados, citrus and eggs contributed greatly to the final value, as well as herbs, which made it into the Top Ten crops for the first time in 2008.*

San Diego County's unique topography creates a wide variety of microclimates resulting in nearly 30 different types of vegetation communities. This diversity allows for San Diego to grow over 200 different agricultural commodities - from strawberries and tomatoes along the coast, to apples in the mountain areas, to palm trees in the desert. The diversity and success of San Diego County's agricultural industry is reflected in the 37 crops with a value of over \$1 million.

This report would not be possible without the many farmers, ranchers, and nurserymen and women who provide the information vital to this report. In addition, I would like to thank industry groups for their support in the compilation of these statistics. Additionally, recognition should be given to the dedicated Agriculture, Weights and Measures staff who continually strive to provide our customers with superior service.

Sincerely,

Robert G. Atkins
 Agricultural Commissioner/
 Sealer of Weights and Measures

* All reported figures represent Freight on Board (F.O.B.) values for products. These are not net values and do not reflect cost of production. Total values may not add precisely due to rounding. Gross value of farm products does not reflect the total value to the economy.

Summary of Major Crops

Total Value	\$1,552,221,674
Change in Value from 2007	\$15,791,701
Percent Change	+1.0%
Total Acreage	312,766
Change in Acreage from 2007	3,775
Percent Change	+1.2%
Highest Value Crop, Per Acre	Indoor Flowering & Foliage Plants
Value Per Acre	\$498,564
Lowest Value Crop, Per Acre	Oat Grain
Value Per Acre	\$15

Overview of Changes

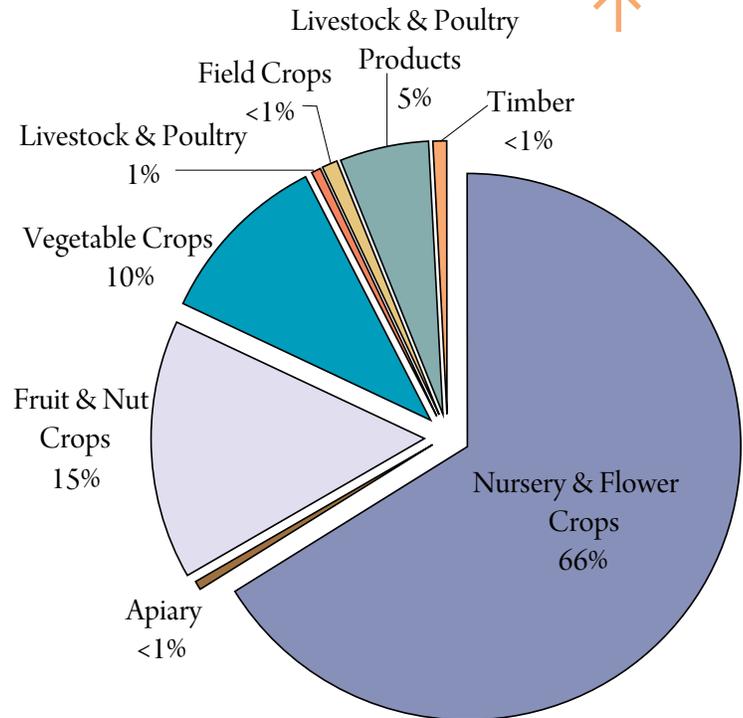
Indoor Flowering and Foliage Plants remains the number one crop in San Diego County although decreasing slightly in value (1%) to \$319,080,960. Ornamental Trees and Shrubs, which last year came in a close second, slipped a bit more (5%) to \$304,336,245. Overall acreage for nurseries and cut flowers increased slightly while the total value stayed nearly flat, increasing only 1%. In 2008, the total value for all nursery products (including cut flowers and foliage) topped the one billion dollar mark for the second year in a row, totaling \$1,042,703,756.

Fruit and Nut Crops increased in acreage (1%), and increased in value (4%). Avocados remain the largest fruit crop, increasing significantly this year (14%). Strawberries, however, decreased significantly in both acreage and value (48% each). This is attributed to improved data gathering.

Vegetables and Vine Fruits increased both in value (2%) and acreage (5%) this past year. Herbs increased in value (39%), pushing it into the Top Ten crops for San Diego County.

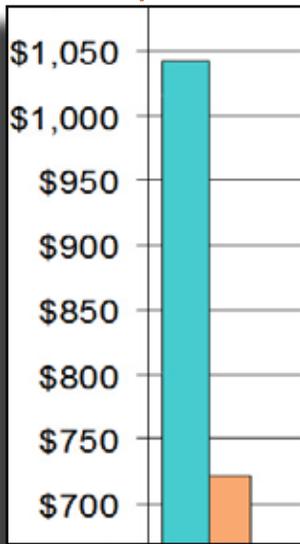
Livestock and Poultry decreased in value (39%), primarily as a result of the decrease in the price and number of cattle. Ratites and ratite products decreased significantly (-93% and -57%, respectively), as there were no reported sales for ratite chicks or hides for 2008. However, due to the increase in the price and number of eggs, Livestock and Poultry Products overall increased in value (17%).

Major Crop Percentages



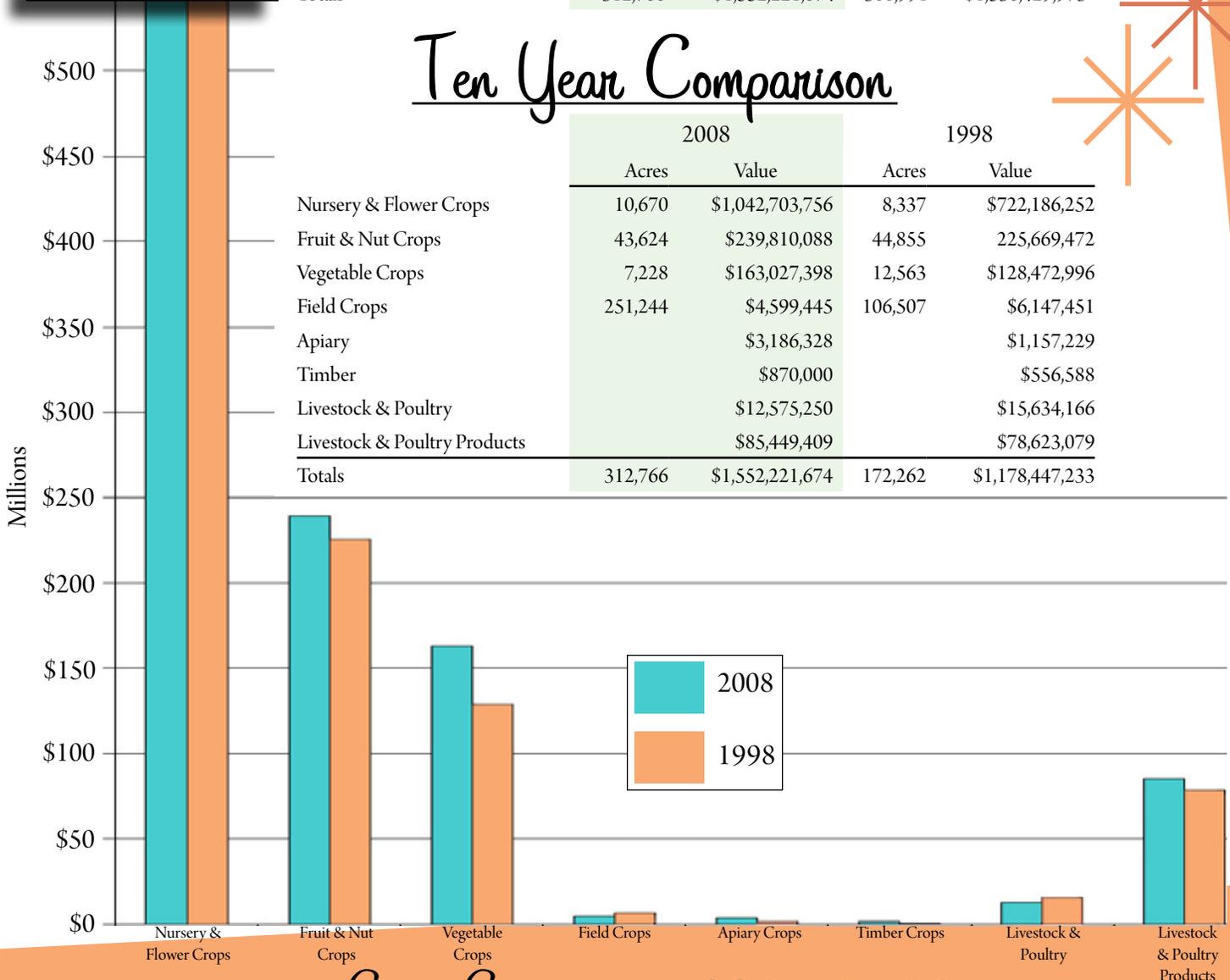
Comparisons of Major Crops

Two Year Comparison



	2008		2007	
	Acres	Value	Acres	Value
Nursery & Flower Crops	10,670	\$1,042,703,756	9,836	\$1,042,461,078
Fruit & Nut Crops	43,624	\$239,810,088	46,180	\$231,160,982
Vegetable Crops	7,228	\$163,027,398	6,888	\$159,549,612
Field Crops	251,244	\$4,599,445	246,087	\$5,299,084
Apiary		\$3,186,328		\$3,423,868
Timber		\$870,000		\$749,310
Livestock & Poultry		\$12,575,250		\$20,461,957
Livestock & Poultry Products		\$85,449,409		\$73,324,083
Totals	312,766	\$1,552,221,674	308,991	\$1,536,429,973

Ten Year Comparison



Crop Comparison 1998 to 2008

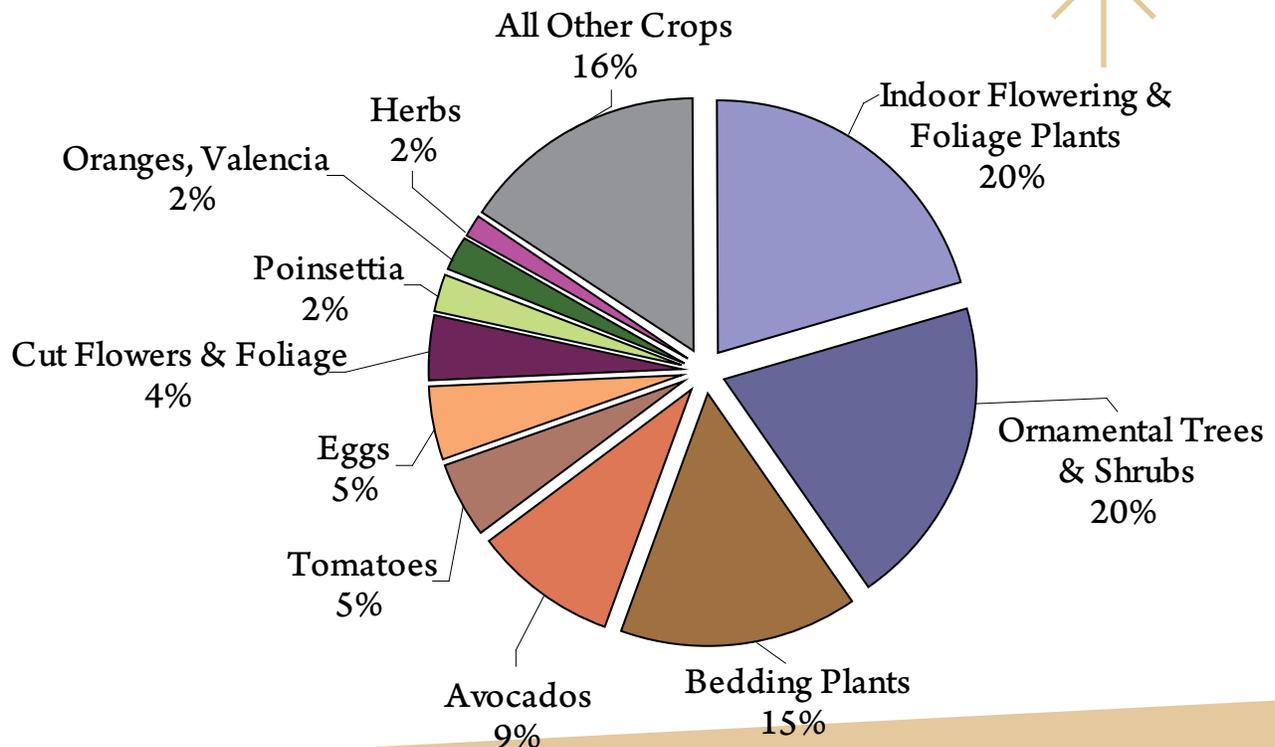
Top Ten Crops



	2008	2007	1998
Indoor Flowering & Foliage Plants	\$319,080,960	\$322,339,342	\$295,878,756
Ornamental Trees & Shrubs	\$304,336,245	\$321,830,298	\$129,986,578
Bedding Plants	\$237,288,380	\$237,048,120	\$146,565,455
Avocados	\$144,694,905	\$127,099,496	\$136,500,282
Tomatoes	\$74,241,799	\$88,061,693	\$35,313,316
Eggs	\$70,764,375	\$56,338,333	\$55,432,079
Cut Flowers & Foliage	\$67,455,433	\$60,204,650	\$81,326,059
Poinsettia	\$38,671,854	\$38,794,400	\$31,254,654
Oranges, Valencia	\$26,875,129	\$26,891,110	\$27,008,583
Herbs	\$23,555,340	\$17,000,948	\$22,385,918
All Other Crops	\$245,257,255	\$240,821,584	\$216,795,553



Top Ten Crop Percentages





What Makes San Diego Agriculture Unique?

- San Diego County is the most southwestern county in the United States with a geographic area of 4,200 square miles, approximately the size of Connecticut, and a population of more than 3 million.
- The National Weather Service describes the San Diego climate as the most nearly perfect in America, characterized as Mediterranean, with warm winters and cool summers.
- San Diego County's varied topography creates a wide fluctuation of microclimates resulting in nearly 30 different types of vegetation communities. This diversity allows San Diego to grow over 200 different agricultural commodities - from strawberries and tomatoes along the coast, to apples in the mountain areas, to palm trees in the desert.
- San Diego County has the 6th highest urban population among counties in the United States, but the County also has the 16th largest agricultural economy.

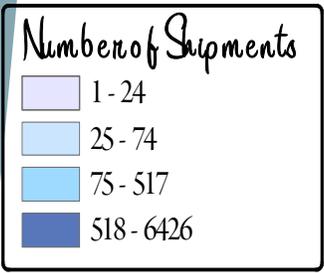
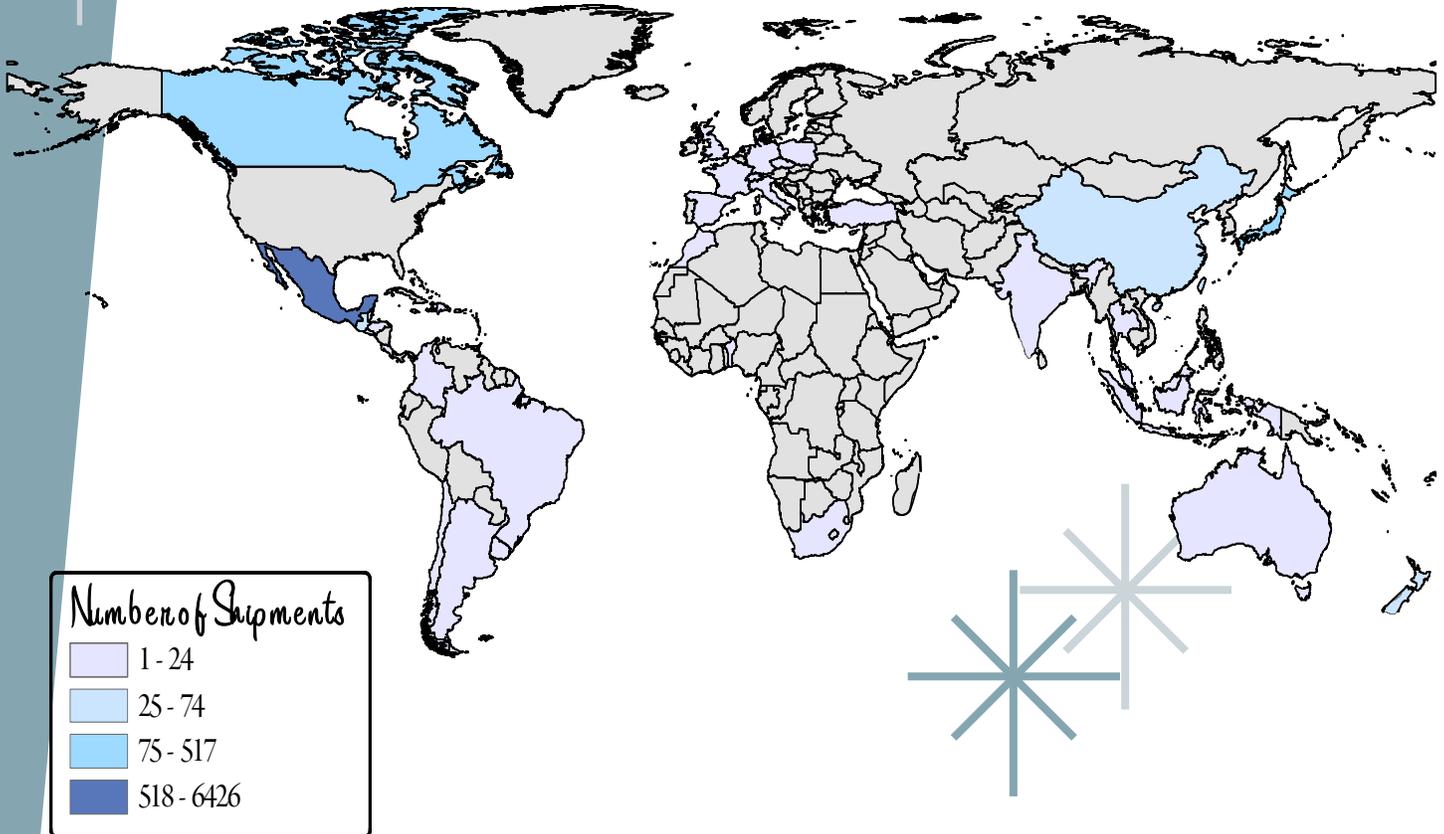


- Nearly 27% of farms in San Diego County are operated by women.
- Agriculture in San Diego County covers 312,766 acres and is a key contributor to San Diego County's economy, along with Defense, Manufacturing, Tourism and Biotechnology.
- San Diego County has 6,687 farms, more than any other county in the United States!!
- 68% of San Diego County farms are 1-9 acres. A median size farm in San Diego is only 4 acres!

- The high cost of water and land makes farming in San Diego County expensive and encourages growers to raise products with a high dollar value per acre.
- San Diego County ranks number one in both California and the nation in the production value of nursery, floriculture, and avocados.
- Statewide, San Diego County is in the top five in the production of avocados, oranges, lemons, grapefruit, tangerines, floriculture, nursery, eggs, fresh market tomatoes, mushrooms, and honey.
- San Diego County produces the highest dollar value per acre (\$4,963/acre) of any county in California.
- San Diego County has the largest community of organic growers in the state and nation, with 343 farms growing more than 150 crops!



Trading Partners



60 Countries, 8065 Shipments

Argentina	4	El Salvador	3	Korea	17	Puerto Rico	74
Australia	21	European Union	1	Kuwait	2	Qatar	1
Bahamas	7	France	2	Macau	7	Saint Martin	1
Barbados	1	French Polynesia	3	Malaysia	4	Singapore	10
Benin	1	Germany	20	Malta	1	South Africa	12
Bermuda	47	Guadeloupe	1	Martinique	1	Spain	5
Brazil	1	Guam	15	Mauritius	1	Switzerland	1
Canada	517	Guatemala	43	Mexico	6,426	Taiwan	36
Chile	4	Honduras	9	Micronesia	3	Thailand	4
China	65	India	2	Morocco	1	Trinidad & Tobago	5
Colombia	8	Indonesia	3	Netherlands	7	Turkey	4
Costa Rica	24	Israel	17	New Zealand	48	United Kingdom	14
Cyprus	1	Italy	8	N. Mariana Islands	1	Uruguay	2
Czech Republic	1	Jamaica	8	Philippines	1	Vietnam	4
Denmark	2	Japan	513	Poland	4		
Dominican Republic	16						



Photo credit: Georgie Sharp

Nursery Crops

Crop	Year	Acres	Total
Bedding Plants, Color	2008	980	\$237,288,380
	2007	920	\$237,048,120
Bulbs, Corms, Rhizomes, Roots, Tubers	2008	185	\$3,409,920
	2007	165	\$3,617,295
Cacti & Succulents	2008	235	\$20,201,775
	2007	216	\$17,489,088
Citrus, Avocado, & Subtropical Fruit Trees	2008	275	\$15,071,100
	2007	235	\$13,120,990
Herbaceous Perennials	2008	382	\$26,878,284
	2007	330	\$19,414,890
Indoor Flowering & Foliage Plants	2008	640	\$319,080,960
	2007	598	\$322,339,342
Ornamental Trees & Shrubs	2008	3,765	\$304,336,245
	2007	3,502	\$321,830,298
Poinsettia	2008	142	\$38,671,854
	2007	142	\$38,794,400
Miscellaneous Nursery Products*	2008	605	\$10,309,805
	2007	591	\$8,602,005

Nursery & Cut Flower Crops

Cut Flower & Foliage Crops

Crop	Year	Acres	Total
Leptospermum	2008	396	\$1,898,028
	2007	332	\$1,801,764
Proteas	2008	550	\$3,437,500
	2007	500	\$3,466,140
Wax Flowers	2008	770	\$5,357,660
	2007	705	\$4,722,090
Other Cut Flowers	2008	950	\$36,846,700
	2007	890	\$36,628,882
Foliage	2008	795	\$19,915,545
	2007	710	\$13,585,774

Nursery & Cut Flower Totals

	Year	Acres	Total
Nursery	2008	7,209	\$975,248,323
	2007	6,699	\$982,256,428
Cut Flowers & Foliage	2008	3,461	\$67,455,433
	2007	3,317	\$60,204,650
Total	2008	10,670	\$1,042,703,756
	2007	9,836	\$1,042,461,078

Value of Ornamental Trees & Shrubs

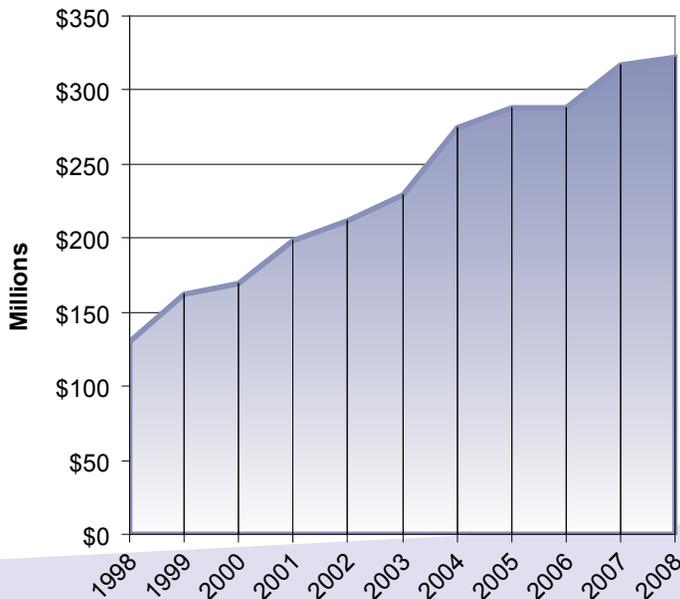


Photo credit: travelinman43

San Diego Agriculture Quick Fact

San Diego County ranks #1 out of 2,703 counties in the United States that produce Nursery, Greenhouse, Floriculture and Sod crops.

*Includes Turf and Cut Christmas Trees

Fruit & Nut Crops*



Photo credit:miramar 2009

Crop	Year	Acres	Tons /Acre	Tons Total	US \$ /Ton	Total
Apples	2008	270	1.5	405	814	\$329,670
	2007	442	1.1	486	723	\$351,523
Total Avocados	2008	26,549		59,805		\$144,694,905
	2007	26,064		67,002		\$127,099,496
Hass	2008	24,506	2.3	56,364	2,476	\$139,556,769
	2007	24,208	2.7	65,362	1,910	\$124,840,656
Lamb-Hass	2008	1,100	2.1	2,310	1,852	\$4,278,120
	2007	995	1.0	995	1,812	\$1,802,940
Other	2008	943	1.2	1,132	760	\$860,016
	2007	861	0.8	646	706	\$455,900
Berries, Misc.	2008	221	6.4	1,414	4,400	\$6,223,360
	2007	127	9.4	1,194	4,350	\$5,193,030
Total Citrus	2008	14,650		216,092		\$64,586,235
	2007	14,464		205,051		\$60,450,517
Total Grapefruit	2008	2,217	16.8	37,246		\$7,351,129
	2007	2,145	17.4	37,323		\$6,535,386
Fresh Market	2008		12.7	28,156	233	\$6,560,325
	2007		13.2	28,314	206	\$5,832,684
Byproduct	2008		4.1	9,090	87	\$790,804
	2007		4.2	9,009	78	\$702,702

Crop	Year	Acres	Tons /Acre	Tons Total	US \$ /Ton	Total
Kumquats	2008	219	2.5	548	1,595	\$873,263
	2007	224	3.0	672	1,764	\$1,185,408
Total Lemons	2008	3,922	12.6	49,417		\$20,047,695
	2007	3,743	12.8	47,910		\$17,852,613
Fresh Market	2008		8.5	33,337	543	\$18,101,991
	2007		8.6	32,190	496	\$15,966,141
Byproduct	2008		4.1	16,080	121	\$1,945,704
	2007		4.2	15,721	120	\$1,886,472
Total Limes	2008	357	10.5	3,749		\$1,170,068
	2007	351	10.8	3,791		\$1,079,430
Fresh Market	2008		6.5	2,321	455	\$1,055,828
	2007		6.9	2,422	405	\$980,870
Byproduct	2008		4.0	1,428	80	\$114,240
	2007		3.9	1,369	72	\$98,561



Photo credit:heqarty david

At a Glance...10 Years of Avocados*

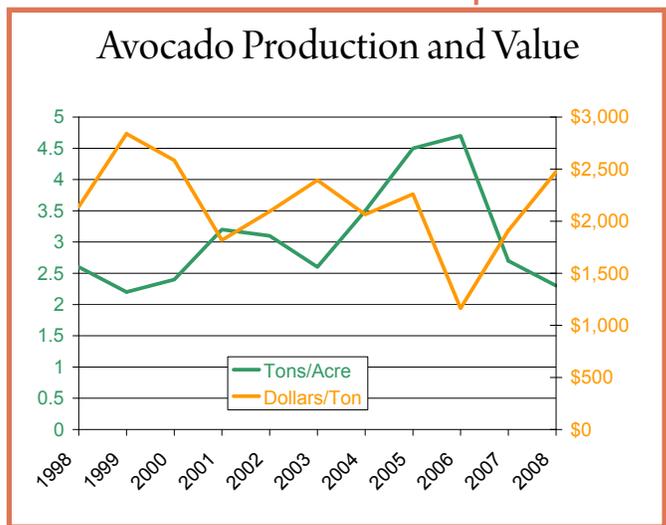


Photo credit:avlyz

Year	Value of Avocados	Value of Agriculture	% of Total
1998	\$136,500,282	\$1,178,447,233	11.6%
1999	\$147,846,527	\$1,236,343,113	12.0%
2000	\$149,549,586	\$1,254,509,514	11.9%
2001	\$138,624,103	\$1,289,741,407	10.7%
2002	\$152,277,067	\$1,297,278,470	11.7%
2003	\$146,171,423	\$1,351,225,412	10.8%
2004	\$175,006,539	\$1,462,117,741	12.0%
2005	\$251,452,135	\$1,531,541,236	16.4%
2006	\$137,305,800	\$1,461,665,261	9.4%
2007	\$127,099,496	\$1,536,429,974	8.3%
2008	\$144,694,905	\$1,552,221,674	9.3%



Photo credit:Aquafornia

Fruit & Nut Crops

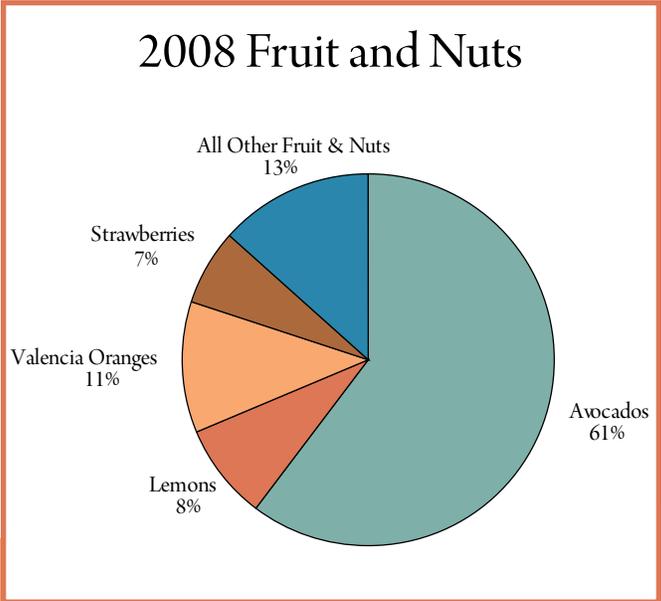
Crop	Year	Acres	Tons /Acre	Tons Total	US \$ /Ton	Total
Total Navels	2008	1,472	11.2	16,486		\$4,296,768
	2007	1,420	10.6	15,052		\$3,721,820
Fresh Market	2008		7.5	11,040	330	\$3,643,200
	2007		7.1	10,082	310	\$3,125,420
Byproduct	2008		3.7	5,446	120	\$653,568
	2007		3.5	4,970	120	\$596,400
Total Valencias	2008	5,531	17.2	95,133		\$26,875,129
	2007	5,632	15.4	86,733		\$26,891,110
Fresh Market	2008		12.9	71,350	336	\$23,973,566
	2007		11.3	63,642	379	\$24,120,166
Byproduct	2008		4.3	23,783	122	\$2,901,563
	2007		4.1	23,091	120	\$2,770,944
Total Tangerines	2008	932	14.5	13,514		\$3,972,184
	2007	949	14.3	13,571		\$3,184,749
Fresh Market	2008		11.0	10,252	355	\$3,639,460
	2007		10.7	10,154	281	\$2,853,358
Byproduct	2008		3.5	3,262	102	\$332,724
	2007		3.6	3,416	97	\$331,391

Crop	Year	Acres	Tons /Acre	Tons Total	US \$ /Ton	Total
Grapes, Wine	2008	365	1.7	621	1,021	\$633,531
	2007	328	1.9	623	995	\$620,084
Macadamia Nuts	2008	63	0.7	44	2,871	\$126,611
	2007	61	0.9	55	3,458	\$189,844
Misc Fruit & Nuts*	2008	707				\$5,186,552
	2007	538				\$4,298,620
Persimmons	2008	354	5.5	1,947	841	\$1,637,427
	2007	420	6.1	2,562	643	\$1,647,366
Total Strawberries	2008	445	33.8	15,041		\$16,391,798
	2007	863	34.7	29,947		\$31,310,503
Fresh Market	2008		19.5	8,678	1,482	\$12,860,055
	2007		20.2	17,433	1,430	\$24,928,618
Processing	2008		14.3	6,364	555	\$3,531,743
	2007		14.5	12,514	510	\$6,381,885

Total Fruit & Nuts		
Year	Acres	Total
2008	43,624	\$239,810,088
2007	43,307	\$231,160,982



Photo credit:Beyond Forgetting



San Diego Agriculture Quick Fact

According to the USDA's 2007 Census of Agriculture, the number of farms in San Diego County increased 27% between 2002 and 2007, from 5,255 to 6,687.

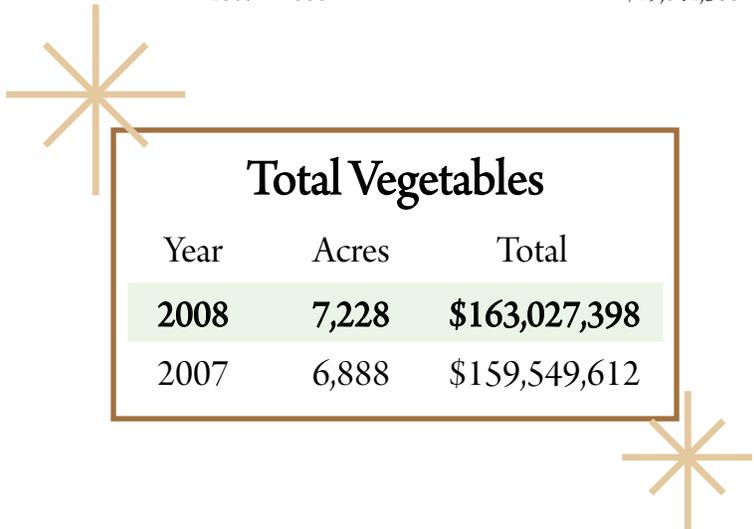
*Includes Apricots, Cherimoyas, Guavas, Peaches, Pears, Walnuts and Others.

Vegetable Crops*



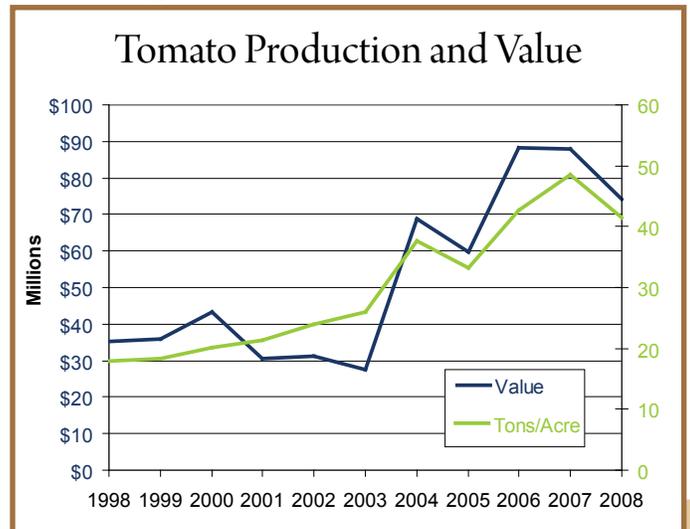
Crop	Year	Acres	Tons /Acre	Tons Total	US \$ /Ton	Total
Beans, Snap	2008	306	5.4	1,652	\$1,330	\$2,197,692
	2007	296	7.2	2,131	\$1,404	\$2,992,205
Bunch Veg.*	2008	885				\$7,801,275
	2007	583				\$4,908,568
Corn, Sweet	2008	144	7.6	1,094	\$472	\$516,557
	2007	176	7.8	1,373	\$656	\$900,557
Cucumbers	2008	339	16.4	5,560	\$518	\$2,879,873
	2007	347	16.8	5,830	\$780	\$4,547,088
Herbs	2008	482	18.0	8,676	\$2,715	\$23,555,340
	2007	359	18.2	6,534	\$2,602	\$17,000,948
Lettuce	2008	580	11.0	6,380	\$519	\$3,311,220
	2007	590	10.8	6,372	\$600	\$3,823,200
Melons	2008	166	4.8	797	\$318	\$253,382
	2007	144	4.5	648	\$430	\$278,640
Mushrooms	2008	19	132.0	2,508	\$3,240	\$8,125,920
	2007	19	170.0	3,230	\$3,155	\$10,190,650
Oriental Veg.**	2008	67				\$549,534
	2007	61				\$585,710
Peppers	2008	188	18.1	3,403	\$730	\$2,484,044
	2007	154	18.2	2,803	\$688	\$1,928,326

Crop	Year	Acres	Tons /Acre	Tons Total	US \$ /Ton	Total
Potatoes	2008	603	12.5	7,538	\$367	\$2,766,263
	2007	603	16.5	9,950	\$200	\$1,989,900
Squash	2008	241	10.7	2,579	\$594	\$1,531,748
	2007	355	10.8	3,834	\$652	\$2,499,768
Tomatoes	2008	2,179	41.5	90,429	\$821	\$74,241,799
	2007	2,313	48.5	112,181	\$785	\$88,061,693
Misc Veg.***	2008	1,029				\$32,812,752
	2007	888				\$19,842,360



At a Glance...10 Years of Tomatoes

Year	Value	Tons/Acre
1998	\$35,313,316	17.9
1999	\$35,803,562	18.3
2000	\$43,372,452	20.2
2001	\$30,578,337	21.3
2002	\$31,071,677	23.9
2003	\$27,481,381	25.9
2004	\$68,858,898	37.6
2005	\$59,729,263	33.2
2006	\$88,378,386	42.6
2007	\$88,061,693	48.5
2008	\$74,241,799	41.5



* Includes Collards, Green Onions, Mustard and Turnip Greens, Parsley, Radishes and Spinach
 ** Includes Bamboo Shoots, Bok Choy, Chinese Greens, Daikon, Gai Choy, Gai Lon and Snap Peas
 *** Includes Cauliflower, Celery, Chayote, Sweet Potatoes, Tomatillos and Others



Photo credit: Sir Mervs

Field & Specialty Crops

Field Crops

Crop	Year	Acres Harvested	Tons/ Acre	Tons Total Production	US \$ /Ton	Total
Barley, Grain	2008	250	1.1	275	160.00	\$44,000
	2007	900	1.2	1,080	148.00	\$159,840
Greenchop	2008	85	22.0	1,870	27.00	\$50,490
	2007	85	21.5	1,828	27.20	\$49,708
Hay, Oat	2008	1,000	1.3	1,300	92.00	\$119,600
	2007	1,000	1.2	1,200	71.00	\$85,200
Oat, Grain	2008	250	0.1	25	150.00	\$3,750
	2007	275	0.1	28	140.00	\$3,850
Pasture, Irrigated	2008	1,560			1,880.00	\$2,932,800
	2007	1,905			1,880.00	\$3,581,400
Range	2008	248,072			5.80	\$1,438,818
	2007	241,882			5.80	\$1,402,916
Silage	2008	27	13.7	370	27.00	\$9,987
	2007	40	14.7	588	27.50	\$16,170

Total Field

Year	Acres	Total
2008	251,244	\$4,599,445
2007	246,087	\$5,299,084



San Diego Agriculture Quick Fact

In 2007, San Diego bee keepers produced over a million pounds of honey! San Diego ranks 5th in the state for honey production.

Timber Crops

Crop	Year	Value
Timber	2008	\$120,000
	2007	\$170,000
Firewood	2008	\$750,000
	2007	\$579,310



Total Timber

Year	Total
2008	\$870,000
2007	\$749,310



Photo credit: HOBO

Apiary Crops

Crop	Year	Value
Honey	2008	\$2,001,886
	2007	\$2,206,236
Bees Wax	2008	\$62,997
	2007	\$54,222
Bees & Queens	2008	\$150,200
	2007	\$166,889
Pollen	2008	\$65,810
	2007	\$84,971
Pollination	2008	\$905,435
	2007	\$911,550

Total Apiary

Year	Total
2008	\$3,186,328
2007	\$3,423,868

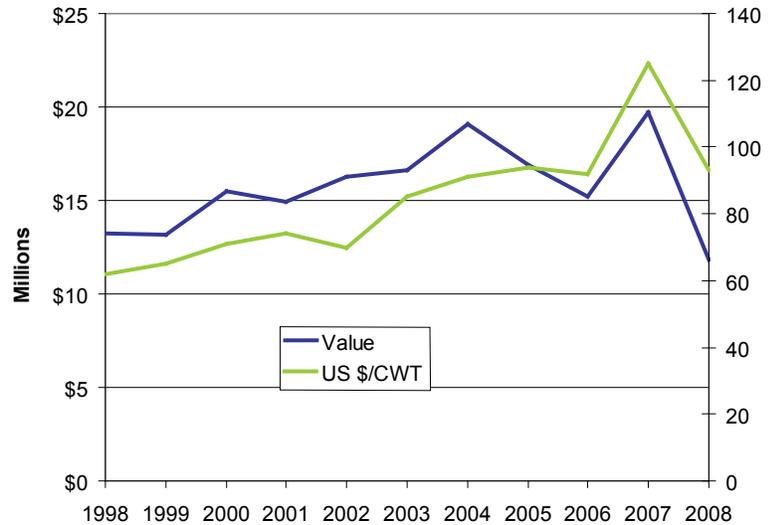
Livestock, Poultry & Products



Livestock & Poultry

Crop	Year	Number of Head	Total CWT*	US \$/CWT	Total
Cattle and Calves	2008	17,000	127,500	\$92.90	\$11,844,750
	2007	21,000	157,500	\$125.00	\$19,687,500
Hogs and Pigs	2008	800	2,000	\$48.00	\$96,000
	2007	1,300	3,250	\$48.80	\$158,600
Chickens	2008	557,500	22,300	\$24.00	\$535,200
	2007	557,500	22,300	\$20.00	\$446,000
Ratites Total	2008				\$8,000
	2007				\$118,000
Chicks	2008	0		n/a	\$0
	2007	550		\$110.00	\$60,500
Meat	2008	1,000 lbs		\$8.00	\$8,000
	2007	10,000 lbs		\$5.75	\$57,500
Lambs and Sheep	2008	1,000	1,000	\$91.30	\$91,300
	2007	573	573	\$90.50	\$51,857

Value and Price of Cattle and Calves



San Diego Agriculture Quick Fact

With more than 2 million "layers," San Diego County ranks 3rd in the state for numbers of egg-laying chickens.

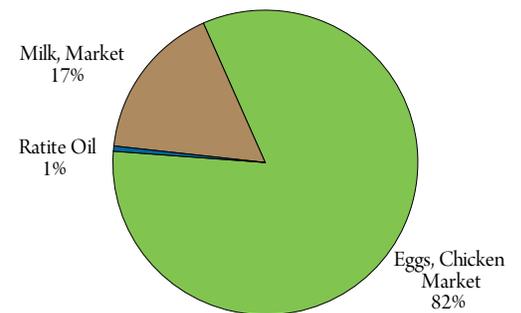
Total Livestock & Poultry

Year	Number	Total
2008	576,300	\$12,575,250
2007	580,923	\$20,461,957

Livestock & Poultry Products

Crop	Year	Number	Total CWT	US \$/Unit	Total
Milk, Market	2008		816,582	\$17.31	\$14,135,034
	2007		840,718	\$18.67	\$15,699,000
Eggs, Chicken Market	2008	70,764,375 dz		\$1.00	\$70,764,375
	2007	64,020,833 dz		\$0.88	\$56,338,333
Ratite Products Total	2008				\$550,000
	2007				\$1,286,750
Hides	2008	0		n/a	\$0
	2007	50		\$135.00	\$6,750
Ratite Oil	2008	1,100 gal		\$500.00	\$550,000
	2007	1,000 gal		\$1,280.00	\$1,280,000

Livestock and Poultry Products



Total Livestock & Poultry Products

Year	Total
2008	\$85,449,409
2007	\$73,324,083

* * Our Girl "Friday"

Benjamin Franklin said, "An ounce of prevention is worth a pound of cure." In 2008, San Diego County gained not just an ounce of prevention, but 60 pounds of it! This past year, we welcomed Friday, a 3-year-old female black Labrador retriever, our newest tool in the search for unmarked and often illegal agricultural products. Without proper certification and inspection, these products enter the county bringing unwanted disease and insect pests. Once these pests are here, it is difficult and expensive to control the resulting damage. The best way to prevent damage to our crops is to stop agricultural pests from entering the county in the first place.

Historically, man's best friend has performed many roles for people, such as hunting, herding, protection, and assisting handicapped individuals. But today, the dog's nose is cutting edge technology and has aided in sniffing out all sorts of things: bombs hidden in luggage, mold or termites buried deep in your house, and diseases such as diabetes and cancer in humans. Dogs' noses have nearly 220 million smell-sensitive cells compared to man's five million smell cells, giving them such a superior sense of smell. Add the fact that dogs are great team players and you have the perfect sleuthing pal.

Like many dogs used in sleuthing jobs, Friday came from humble beginnings and was rescued from an animal shelter. The USDA tests and rejects hundreds of dogs just to find a single candidate to undergo the rigors of the training. Friday was the star pupil of her class. She met her partner, Inspector Jeremy Partch, in October of 2008, and the two of them



Friday and her partner, Jeremy Partch

completed a ten-week training course at the USDA's National Detection Dog Training Center in Orlando, Florida. Initially, Friday was trained to detect fruit such as citrus, mango, guava, and apples. As her training continues, she has added additional scents to her repertoire. She has also learned to walk on conveyor belts and search vehicles to detect illegal or unmarked plant material.



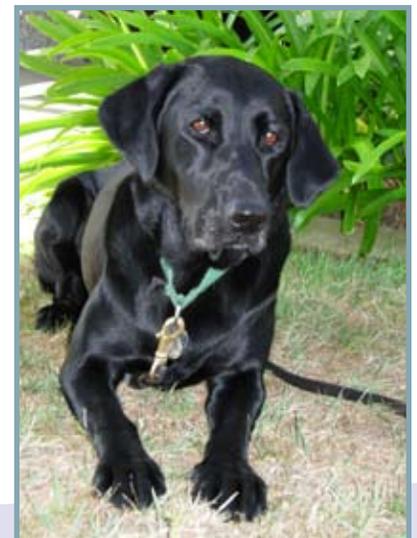
Friday, hard at work

Friday arrived during a year when two quarantines were enacted in San Diego County: Asian Citrus Psyllid (ACP) and Mediterranean Fruit Fly (MFF). During the summer of 2008, a small population of ACP was found in San Diego County. An aggressive control and quarantine program was implemented to protect local and statewide growers from this invasive pest. ACP carries the deadly bacterial

disease called "citrus greening". Fortunately, this disease has not been found in California. Last November, Mediterranean Fruit Fly (MFF) was found in the El Cajon area of San Diego County and a quarantine was implemented which included treatments, increased trapping and sterile fly releases. The female MFF can lay eggs in more than 250 fruits and vegetables and the burrowing larvae render the fruit inedible.

San Diego County was one of three counties in California awarded a contract for a canine inspection team by the California Department of Food and Agriculture. As part of the team, Friday inspects packages at a variety of parcel terminals. In the past, parcel inspections have been limited to an inspector's ability to recognize suspicious packages, which are often designed to conceal their contents. Statewide in 2008, dog teams intercepted 972 unmarked packages containing plant material. Sixty four pests were found, and 54 were found to be of significant concern, having either an A or Q rating.

We are excited to have such an effective resource in the effort to protect San Diego County's \$1.5 billion agricultural industry. She is truly our girl Friday.



Friday, sitting pretty for the camera

See http://www.cdffa.ca.gov/PHPPS/ar/pe_interior_cdt.html for more information on California Dog Teams.

Sustainable Agriculture

The California Department of Food and Agriculture (CDFA) defines A-rated pests as organisms of known economic importance, subject to state-enforced action involving eradication, quarantine, containment, rejection, or other holding action.

A-Rated Pest Finds

<i>Alloea clavulium</i> , Alloea Snail	6
<i>Aspidiotus destructor</i> , Coconut Scale	3
<i>Bactrocera dorsalis</i> , Oriental Fruit Fly	2
<i>Bactrocera oleae</i> , Olive Fruit Fly	4
<i>Ceratitis capitata</i> , Mediterranean Fruit Fly	13
<i>Ceroplastes floridensis</i> , Florida Wax Scale	1
<i>Ceroplastes rubens</i> , Red Wax Scale	4
<i>Ceroplastes rusci</i> , Fig Wax Scale	18
<i>Ceroplastes sp.</i> , Wax Scale	2
<i>Chrysodeixis eriosoma</i> , Green Garden Looper	2
<i>Chrysomphalus aonidum</i> , Florida Red Scale	1
<i>Coccus viridis</i> , Green Scale	3
<i>Diaprepes abbreviatus</i> , Diaprepes Root Weevil	1
<i>Fusarium oxysporum</i> , Fusarium Wilt	1
<i>Howardia biclavis</i> , Mining Scale	1
<i>Hydrilla verticillata</i> , Hydrilla	1
<i>Pinnaspis strachani</i> , Lesser Snow Scale	5
<i>Pseudaulacaspis cockerelli</i> , Magnolia White Scale	102
<i>Pseudaulacaspis pentagona</i> , White Peach Scale	1
<i>Pseudococcus citriculus</i> , Citriculus mealybug	1
<i>Radopholus similis</i> , Burrowing Nematode	1
<i>Solenopsis invicta</i> , Red Imported Fire Ant	7



Diaprepes Root Weevil



Mediterranean Fruit Fly

The CDFA defines Q-rated pests as organisms requiring a temporary 'A' action, pending determination of a permanent rating. The organism is suspected to be of economic importance, but its status is uncertain because of incomplete identification or inadequate information.

Q-Rated Pest Finds

<i>Agaillia sp.</i> , Leafhopper	5	<i>Pheidole sp.</i> , Ant	1
<i>Aulacaspis yasumatsui</i> , Cycad Aulacaspis Scale	3	<i>Phytophthora ramorum</i> , Sudden Oak Death	1
<i>Carausius morosus</i> , Indian Walking Stick	1	<i>Pinnaspis buxi</i> , Boxwood Scale	1
<i>Ceroplastes sp.</i> , Wax Scale	28	<i>Puccinia horiana</i> , Chrysanthemum White Rust	1
<i>Cicadellidae</i> , Sharpshooter egg masses	2	<i>Ripersiella sp.</i> , Root Mealybug	8
<i>Coloeptera sp.</i> , Wood-boring Beetles	3	<i>Succineidae sp.</i> , Amber Snail	7
<i>Diaphorina citri</i> , Asian Citrus Psyllid	1,082	<i>Uromyces transversalis</i> , Gladiolus Rust	1
<i>Euphyllura olivina</i> , Olive Psyllid	2	<i>Vinsonia stellifera</i> , Stellate Scale	1
<i>Fulgoroidea sp.</i> , Planthopper	1	<i>Xiphinema sp.</i> , Dagger Nematode	1
<i>Halyomorpha halys</i> , Marmorated Stink Bug	1	<i>Zachrysis provisorica</i> , Cuban Land Snail	4
<i>Klambothrips myopori</i> , Myoporum Thrips	31	Various Lepidoptera	5
<i>Palmicultor lumpurensis</i> , Bamboo Mealybug	19	Various Mealybugs	7
<i>Palmicultor palmarum</i> , Palm Mealybug	1	Various Scales	4
<i>Peronospora sp.</i> , Downy Mildew	2	Various Snails	6



Yellow Starthistle



Purple Loosestrife



Pest Management Technicians spraying Perennial Pepperweed

Invasive Weed Control Activities

Weed	Rating	Removal Methods	Scope of Treatment
Spotted Knapweed <i>Centaurea biebersteinii</i>	A	Herbicides Hand Removal	3 Sites, 10.2 Acres
Purple Loosestrife <i>Lythrum salicaria</i>	B	Herbicides Hand Removal	2 Sites, 1 Acre
Perennial Pepperweed <i>Lepidium latifolium</i>	B	Herbicides Hand Removal	18 Sites, 215 Acres
Tamarisk <i>Tamarix ramosissima</i>	B	Herbicides	1 Site, 32.9 Acres
Cape Ivy <i>Delairea odorata</i>	C	Herbicides	1 Site, 0.2 Acres
Yellow Starthistle <i>Centaurea solstitialis</i>	C	Herbicides Hand Removal	8 Sites, 14 Acres

* Programs and Services

Pest Detection is a critical component of the statewide pest prevention network, providing an early warning system designed to detect the introduction and prevent the establishment of harmful insect pests such as fruit flies, Japanese beetle, and Gypsy moth. In 2008, a total of 253,909 trap inspections were conducted.



Pesticide Regulation is responsible for the implementation of state and federal pesticide laws and regulations. Inspections, investigations, and permits ensure pesticides are used in a responsible manner that protects the environment, the public and the employees of businesses that handle pesticides. Highlights for 2008:

- Successfully supported industry's legislative efforts to include San Diego County in the Structural Fumigation Enforcement Program.
- Completed over 1,100 pesticide use monitoring inspections to assess and document whether pesticide use activities were in compliance with laws designed to assure safety of handlers, field workers, the public and the environment.
- Presented four Fieldworker Training sessions in Spanish at various locations throughout the county to help growers ensure worker safety.

Agricultural Water Quality carries out the requirements of the County's Stormwater Permit, issued by the San Diego Regional Water Quality Control Board (RWQCB) and provides hazardous materials information for first responders and citizens. Education, inspections and investigations are aimed at reducing contaminants in local waterways. Inspections focus on "high priority commercial facilities," including nurseries, greenhouses, agricultural and structural pest control businesses, and equestrian facilities. Highlights for 2008:

- Improved compliance with Stormwater Training requirements by developing a forms package to simplify training and documentation and decreased need for on-site re-inspections by using new "Return to Compliance" documentation form.
- Completed a vision session with Department of Public Works to streamline stormwater inspections.

Integrated Pest Control performs eradication and control of invasive weeds such as spotted knapweed, tamarisk, and perennial pepperweed. Other activities include rodent bait production and weed control on roadsides, airports, flood control channels, sewage treatment plants and inactive landfills. In 2008:

- 3,062 acres of weed control performed on County roadsides and airports.
- 176 County-operated facilities received structural pest control.
- 20,854 pounds of rodent bait manufactured.

Civil Actions serves as an advocate at hearings for violations found by inspectors in all programs. In 2008, a total of 402 cases were completed in the following categories:

- | | |
|---|--------------------------------------|
| • Certified Farmers' Market Actions: 21 | • Quarantine Actions: 1 |
| • Structural Pesticides Actions: 35 | • Agricultural Pesticide Actions: 53 |
| • Standards Enforcement Actions: 290 | • Organics Program Actions: 2 |

Plant Health and Pest Prevention performs annual inspections of nurseries throughout the county to ensure cleanliness and proper licensing, certifies that San Diego's outgoing agricultural products meet the plant cleanliness requirements of the importing country, state or county and inspects shipments of produce and plants coming into San Diego County from other countries and states for exotic pests. Highlights for 2008:

- 8,694 acres of nursery stock inspected at 632 production facilities.
- 65 new nurseries licensed.
- 1,385 outgoing plant shipments certified as free of glassy-winged sharpshooter.
- 16,200 shipments of incoming plant material inspected and 84 exotic noxious pests intercepted.
- 16,975 shipments of agricultural commodities certified for export to 60 countries and 22 states.
- 314 nurseries comprising 5,310 acres inspected for sudden oak death, 1 positive find requiring 31 trace forwards.



Standards Enforcement conducts consumer protection regulatory work by checking weighing and measuring devices, price verification of scanners, certified farmers' markets, organic farming, and fruit, vegetable and shell egg quality. Highlights for 2008:

- 45,963 commercial weighing and measuring devices (scales, gas pumps, utility sub-meters, taximeters, etc.) inspected, providing assurance of accuracy to both purchasers and sellers in transactions based upon weight, measure, or count. 93% of commercial devices inspected were in compliance on initial inspection.
- 36 active farmers' markets in San Diego County and 149 local growers certified.
- 343 growers registered as organic in San Diego County, the largest community of organic growers in the country.
- 58 egg facilities inspected for quality 192 times.
- 556 consumer complaints about commercial meters, petroleum and price overcharges investigated.

Environmental Services prepares crop statistics, documents agricultural losses and provides agricultural information to land use projects involving agricultural lands. Special projects include community outreach and media relations.



The County Veterinarian operates the only County-run animal disease diagnostic laboratory in the State, as well as the Entomology and Plant Pathology laboratories. Their services are critical for rapid insect and plant disease identification and minimizing new pest infestations. The San Diego Animal Disease Diagnostic Laboratory examines specimens from domestic animals and wildlife for pathogens affecting animals and diseases transmissible to humans, including rabies, plague, West Nile Virus, Newcastle disease, E. coli, and Avian Influenza. Highlights for 2008:

- 3,399 necropsies and other tests were performed, comprising 786 domestic dogs, 377 domestic cats, 1,327 birds, 62 livestock, 37 equine, 239 wildlife, 18 fish/reptiles/amphibians, 178 tick group tests and 846 rabies tests.
- The Plant Pathology lab processed 9,959 samples.
- The Entomology Lab processed 41,189 samples and handled 1,074 bee calls.



Contact Us



Main Phone: (858)694-8988 Website: www.sdcawm.org Email: sdcawm@sdcounty.ca.gov

Program	Services	Number
Agricultural Water Quality	Stormwater; agricultural hazardous material storage	(858)694-8980
Entomology	Insect identification; apiary registration; pest surveys	(858)694-3076
Environmental Services	Crop statistics; land use issues; public information	(858)694-2775
Integrated Pest Control	Invasive weed control; rodent bait production	(858)694-3540
Plant Health & Pest Prevention	Licenses to sell nursery products, flowers & foliage; shipping certificates; incoming shipment inspection; nursery inspections; glassy-winged sharpshooter; sudden oak death	(760)752-4700
	Inspection Request Line	(760)752-4713
Pest Detection	Exotic insect trapping/eradication	(858)571-4209 (800)300-TRAP
Pesticide Regulation	Voluntary compliance inspections; registration; operator identification numbers; pesticide use reporting; restricted materials permits; employee pesticide training requirements; pesticide complaints	(858)694-8980
Plant Pathology	Plant disease diagnostic services; plant disease surveys	(858)694-2753
Standards Enforcement	Certified farmers' markets; certified producer certificates; organic handler/producer; egg producer/handler; scanner registration; commercial weighing & measuring devices; device serviceperson; weighmaster	(858)694-2778
Veterinarian	Animal necropsies and associated lab services; wildlife damage complaints	(858)694-2838

Department Personnel

Robert G. Atkins, Agricultural Commissioner/Sealer of Weights & Measures

Donald Bradburn, Deputy Director
Special Programs & Support

Nikos Gurfield,
County Veterinarian

Lisa Leondis, Deputy Director
Agriculture & Standards

Jim Byers, Deputy Commissioner & Sealer
STANDARDS ENFORCEMENT

Ha Dang, Deputy Commissioner & Sealer
PESTICIDE REGULATION

Karen Melvin, Deputy Commissioner & Sealer
PEST DETECTION

Cathy Neville, Deputy Commissioner & Sealer
PLANT HEALTH AND PEST PREVENTION

Dawn Nielsen, Deputy Commissioner & Sealer
INTEGRATED PEST MANAGEMENT, ENVIRONMENTAL
ISSUES

Plant Health & Pest Prevention

Bixby, Clark: Supv ASI
Dobbins, Katie: Supv ASI
Moore, Megan: Supv ASI
Brandon, Delores: Supv ASI

McGuire, Charity: Adm Sec I
Myers, Robin: Office Asst
Austin, Ashley: Sdt Worker

Agriculture/Standards Inspectors:

Agnes Jr., Sulpicio
Basinski, Nick
Betschart, Chris
Delaval, Robert
Desserich, Steve
Farhoomand, Manige
Feeley, Mike
Fritz, David

Ghebretseha, Kahsai
Goss, Nicole
Javed, Saiqa
MacGregor, Robert
McNair, Narriman
Olivares, Jorge
Partch, Jeremy

Rodriguez, Vicente
Savage, Andrea
Sixtus, Ann
Terhall, Greg
Westrick, Jeff
Wube, Muluneh
Yeane, Priscilla

Insect Detection Specialists:

Fanelli, Joseph
Hill, Evelyn
Robinson, Steve

Seeby, Gene
Thewlis, Joan
Torres, Claudia

Pesticide Regulation

Appel, Nancy: Supv ASI
Redding, Stasi: Supv ASI
Wynn, Jim: Supv ASI

Bilog, Gemma: Sr Office Asst
Joseph, Sabumon: Office Asst
Raymond, Suzanne: Ofc Asst
Thomas, Tina: Office Assistant

Ag/Standards Inspectors:

Amador, Abdel
Anzaldo Veronica
Arriaga, Jose
Avina, Tony
Bacon, Warren

Elder, Travis
Estrella, Dinna
Moreno, Lauren
Moss, Adrienne
Olsen, Ted

Sapp, Jason
Silva, Nestor
Springer, Kathryn
Syzonenko, Nancy
Wann, Ryan

Animal Disease Diagnostic Laboratory

Brewer, Karin: Reg Vet Tech
Diosa, April: Student Worker
Doggett, Deborah: Dis Rsrch Sci
Dunne, Gundula: Vet Officer
Ellis, Tracy: Ag Scientist
Grewal, Dr.Saran: Ag Scientist
Heaton, Edith: Reg Vet Tech
Jaworski, Dalphne: Sr Rsrch Sci
Jones, George: Apiary Spec.

Kellum, Dr. David: Ag Scientist
Keon, Elyse: Office Support
Lim, Arleen: Disease Rsrch Sci
Mahoney, Dr. Kerry: Vet Pathlgst
Nolan, Pat: Ag Scientist
Rickman, Dr. Barry: Vet Pathlgst
Silber, Dr. Alex: Vet Pathlgst
Waldrop, Bill: IDS II

Administration

Aragaki, Susie: Admin Analyst
Allen, Veronica: Admin Analyst
Belenzo, Armando: Acct Tech
Chin, Shirley: HR Officer
Espiritu, Erlinda: Purch Clerk
Fornas, Aida: Sr Accountant

Goff, Linda: Admin Trainee
Marshall, Marilyn: Off Support
Pieper, Cirila: Acct Clerk
Powell, Marci: Admin Sec IV
Rushton, Belinda: HR Assistant

Standards Enforcement

Davis, Cindy: Supv ASI
Mares, Marco: Supv ASI
Williams, Rick: Supv ASI

Burton, Ris: Office Asst
Roughton, Mark: Sr Office Asst
Widjaja, Sutjipto: Office Asst

Ag/Standards Inspectors:

Bloomer, Tom
Braaten, Glenn
Bryant, Robert
Connelly, Neil
Deguzman, Janice
Deneau, Louis

Dewall, Paula
Gordon, Lynn
Guidry, Lee
Holbrook, Tim
Kebede, Atlaw
Lyles, Mark

Ong, Quang
Porter, Kevin
Roma, Robert
Shipley, Brad
Silva, Annie
Stevens, Mazen

Pest Detection

Breuninger, Tim: Sr IDS
Feeley, Linda: Sr IDS
Gross, Charles: Sr IDS

Guyot, Cameron: Dept. Clerk
Thomas, Christine: St. Worker
Duh, Tina: St. Worker

Insect Detection Specialists:

Alfaro, Orlando
Allingham, Guy
Arne, Richard
Avila, Rishi
Blank, Linda
Burkman, Brian
Burquez, Raul
Buttner, Mark
Casillas, Manuel

Fregoso, Jorge
Hernandez, Alberto
Hock, Kim
Jama, Mohamed
Joseph, Roy
Leech, Bill
Miller, Bob
Moss, Belinda

Oluwasakin, Daniel
Pierce, Franklin
Robles, Ivan
Roskop-Waters, Kara
Rowin, Mary
Rushton, Paul
Sharon, Alan
Velardi, John
Wagner, Valerie

Integrated Pest Control

Martinez, Mark: Supv PM Tech
Graves, Walter: Env Planner
Winans, Bill: Sr ASI

Pest Management Technicians

Cadena, Paul
Daly, James

Gardner, Bruce
Wood, Ray

Environmental Issues

Carr, Colleen: Sr ASI
Milam, Marcia: ASI

Information Technology/Gis

Acosta, Vince: Sr ASI
Taylor, John: GIS Analyst

Civil Actions

Lorang, Sally: Civil Actions Invstgtr
Peck, Mike: Sdt Worker



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